April 1983

RETRIEVMENT PROGRAM TAX EXPENDITURES: A CASE OF UNSUBSTANTIATED, UNDOCUMENTED, ARBITRARY NUMBERS

During the last two years there have been significant changes in federal tax laws affecting employer sponsored and individually established retirement programs. The Economic Recovery Tax Act (ERTA) of 1981 expanded the availability of Individual Retirement Accounts (IRAs) to include workers already covered by a pension plan. The Tax Equity and Fiscal Responsibility Act (TEFRA) of 1982 reduced tax exempt contribution limits for many private plans.

These and earlier provisions of the U.S. Tax Code have been the subject of much discussion and debate in recent years. The dialogue has often centered on the impact that favorable tax provisions allowed pensions and individual retirement programs have on federal tax collections. Some policy analysts believe that current provisions in the tax law favoring retirement programs help provide retirement income security for most workers. Others think they are unwarranted.

The discussions of these issues are bound to take on a sense of heightened proportions in the coming year for two reasons. The first is that the Federal Budget continues to be plagued by unprecedented deficits meaning that all tax incentives will come under closer scrutiny. The second is that the Treasury Department recently increased its estimate of "tax expenditures" for employer-sponsored retirement plans by 75 to 80 percent. Virtually no explanation was provided for this precipitous increase.

Conceptual Background on Retirement Program Tax Expenditures

As the Budget of the United States Government is prepared each year a set of "tax expenditure" estimates is developed by the Treasury Department and published as part of the Budget. The "tax expenditure" concept was first laid out in 1967 by Stanley S. Surrey, the Deputy Assistant Secretary for Tax Policy at Treasury from 1961 to 1969. He stated:

Through deliberate departures from accepted concepts of net income and through various special exemptions, deductions and credits, our tax system does operate to affect the private economy in ways that are usually accomplished by expenditures -- in effect to produce an expenditure system described in tax language.
When Congressional talk and public opinion turn to reduction and control of Federal expenditures, these tax expenditures are never mentioned. Yet it is clear that if these tax amounts were treated as line items on the expenditure side of the Budget, they would automatically come under close scrutiny of the Congress and the Budget Bureau. 1/

The Congressional Budget Act of 1974 (P.L. 95-544) formally institutionalized "tax expenditures" as part of the regular Budget document. The act defined tax expenditures as "revenue losses attributable to provisions of the Federal tax laws which allow a special exclusion, exemption, or deduction from gross income or which provide a special credit, a preferential rate of tax, or a deferral of tax liability." 2/ Within this context, tax expenditures are defined as "exceptions to the normal structure" of individual and corporate tax rates.

A problem with the concept of tax expenditures is that the tax code does not include a definition of the "normal structure" of the tax system. As the 1983 Budget points out, the term itself is "unfortunate in that it seems to imply that Government has control over all resources. If revenues which are not collected due to 'special' tax provisions represent Government 'expenditures,' why not consider all tax rates below 100% 'special,' in which case all resources are effectively Government-controlled?" 3/ As a result the practical definitions that have arisen in the measurement of annual tax expenditures are not always consistent within or across categories, or from year to year.

An example of this is the Department of Treasury's estimates of the revenue losses or tax expenditures that can be attributed to the favorable tax provisions afforded pensions and individual retirement accounts. In this case the Treasury estimates the federal tax revenue losses that arise because pension and IRA contributions and the fund earnings are not taxed currently even though taxes will be paid when benefits are ultimately paid. The theoretical basis for these estimates is that if employer contributions to pension trusts or individual contributions to IRAs or investment earnings on the assets were taken as regular income, additional tax obligations would arise at the time the contribution is made or when the investment return is paid. The amount of this particular tax expenditure, however, is not simply current reductions of tax revenues but should recognize that there will be future tax collections at the point of distribution and thus represents taxes deferred, not taxes foregone.

It is really differential marginal tax rates over time that give rise to the ultimate tax expenditures. For example, consider a simple case where a

1/ Stanley S. Surrey in a speech to Money Marketeers, New York City, November 15, 1967.
person's life is made up of only two periods. During the first period the person works, earns income and pays income taxes. Assume that this person's employer establishes a pension plan during the first period and makes a $1,000 contribution in behalf of the worker. Assume further that this contribution would have been paid to the worker as wages if it had not been contributed to the pension plan. Furthermore, for simplicity, assume the worker's marginal tax rate is 50 percent. That is, for each additional dollar of earnings the worker's tax liability would increase by 50 cents. Finally, assume that the time price of money or rate of return between the two time periods is 10 percent.

If the employer contribution to the worker's pension account is not taxed during the first period then the government foregoes $500 in tax revenue (.50 X $1,000) during the period. At the beginning of period 2, assume that the worker retires and is eligible to receive the $1,000 plus $100 in interest accrued on the fund since its investment. If the person is still in the 50 percent tax bracket the tax liability on this retirement income will be $550. Given the time price of money, this is equivalent to the tax liability if the pension has been taxed at the point of contribution and if the taxes collected had drawn interest until period 2. In this instance the person does not avoid any taxes by participating in the pension plan; the taxes are merely deferred from the first period to the second. There is no tax expenditure in this case.

If it is assumed, however, that the marginal tax rate in the second period is lower than that in the first then the result is quite different. Assume that in the second period the person's marginal tax rate drops to 30 percent, then the contribution in period 1 results in reduced tax revenues of $500. When the contribution plus interest is taxed in period 2 it nets only $330 in tax revenues. Discounting the period 2 taxes back to period 1 to account for the time price of money means the value of taxes to be collected on the contribution will only be $300. Since $500 is foregone in the current period and the future taxes are only worth $300, the cost to the public fisc, or the tax expenditure, is $200.

Methodological Problems in Retirement Program Tax Expenditure Estimates

The world is not quite as neat as this simple example, however, and thus, the actual estimation of tax expenditures for retirement programs is quite complicated. First, Treasury estimates the foregone taxes from exempting employer pension contributions and personal IRA contributions and the interest paid to these funds. From this foregone collections estimate Treasury subtracts the estimated tax collections on pension benefits paid. The net difference is what they currently call the estimated tax expenditure resulting from the tax treatment of retirement programs.

This calculation procedure would result in a $500 tax expenditure in the first time period in both of the examples cited above. The computation methodology does not consider that if taxes were now collected on pension contributions and trust fund interest accruals that this would necessarily result in a reduction in the taxes to be paid in the future when benefits are disbursed.
From a purely conceptual basis the tax expenditure estimates in this instance are flawed because the estimation procedure does not even attempt to account for the significant difference in tax collections on current benefits paid and the time discounted value of future tax collections based on current contributions under these plans. From a more practical policy analysis perspective, the estimates are further flawed because of the totally unexplained variations in estimates from year to year. Each of these problems is discussed in more detail below.

In the simple single-worker, two-period example used above it was possible to show how the tax expenditures arise and how they are measured. The actual tax expenditure that arose in that case was the difference in the value of the person's lifetime tax obligations that resulted because part of earnings could be deferred as a pension contribution. In the current Treasury estimates of tax expenditures for retirement programs the foregone revenues are estimated on the basis of one set of individuals and the tax collections on pension benefits are estimated on a totally different set of individuals. This procedure would upwardly bias the estimated tax expenditure for two reasons.

The first is that current workers will have higher real earnings levels over their lifetime than current beneficiaries. It is this phenomenon that raises the real level of Social Security and pension benefits alike for succeeding cohorts of retirees. As a result, the marginal tax rates that will be paid on pension benefits earned today will be higher than the marginal tax rates on benefits that are paid today. Underestimating the marginal tax rates that will apply to currently earned benefits will overestimate the magnitude of tax expenditures.

The second reason that current estimation techniques result in biased estimates of retirement program tax expenditures is that the pension system in this country is not yet mature. For example, consider the case of a brand new pension plan in a firm with middle age and younger workers. For several years the employer will make contributions, representing foregone tax collections in the calculation, but no benefits will be paid, and thus, there are no offsetting tax revenues collected that enter the tax expenditure calculation. If the expenditure was estimated by subtracting future discounted taxes on pensions from foregone taxes on current trust fund contributions and interest it would make no difference if there were beneficiaries or not. The maturity of the pension systems would not be important if the tax expenditures were estimated as in the hypothetical example, but is critically important given the actual method of calculation.

Table 1, based on tabulations of information that plan sponsors filed with the IRS (Form 5500) in compliance with ERISA for the 1977 plan year, indicates a clear relationship between plan age and beneficiaries in defined-benefit plans. Defined benefit plans cover two-thirds of private plan participants and an even larger segment of the public plan members. Among other things, Form 5500 requires reporting the "effective plan date" or date the plan was set up.
TABLE 1
WORKING PARTICIPANTS PER BENEFICIARY IN DEFINED BENEFIT
PENSION PLANS WITH MORE THAN 100 ACTIVE PARTICIPANTS
   DURING 1977 BY PLAN AGE

<table>
<thead>
<tr>
<th>Working Participants</th>
<th>Plan Age</th>
<th>Total</th>
<th>Less Than 5 Years</th>
<th>5-10</th>
<th>11-15</th>
<th>16-20</th>
<th>21-25</th>
<th>Over 25</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two or less</td>
<td></td>
<td>5.5</td>
<td>1.9</td>
<td>2.1</td>
<td>3.4</td>
<td>7.0</td>
<td>10.5</td>
<td>12.0</td>
<td>7.6</td>
</tr>
<tr>
<td>More than 2, up to 5</td>
<td></td>
<td>19.8</td>
<td>7.5</td>
<td>10.2</td>
<td>17.2</td>
<td>27.9</td>
<td>31.3</td>
<td>36.9</td>
<td>21.9</td>
</tr>
<tr>
<td>More than 5, up to 10</td>
<td></td>
<td>20.1</td>
<td>10.7</td>
<td>17.4</td>
<td>23.5</td>
<td>25.9</td>
<td>24.9</td>
<td>23.1</td>
<td>21.9</td>
</tr>
<tr>
<td>More than 10, up to 20</td>
<td></td>
<td>15.4</td>
<td>13.1</td>
<td>19.6</td>
<td>19.3</td>
<td>15.7</td>
<td>12.1</td>
<td>9.4</td>
<td>12.5</td>
</tr>
<tr>
<td>More than 20</td>
<td></td>
<td>30.0</td>
<td>55.5</td>
<td>39.7</td>
<td>26.7</td>
<td>16.9</td>
<td>14.4</td>
<td>10.8</td>
<td>26.3</td>
</tr>
<tr>
<td>Unknown a/</td>
<td></td>
<td>9.3</td>
<td>11.3</td>
<td>10.9</td>
<td>9.9</td>
<td>6.7</td>
<td>6.7</td>
<td>7.7</td>
<td>9.8</td>
</tr>
</tbody>
</table>

SOURCE: ERBI tabulations of 1977 plan disclosure data submitted to IRS in
compliance with ERISA.

a/ Includes plans with no beneficiaries reports.

It also requires the number of active participants in the plan, and the number
of beneficiaries be reported. The age of the plan can be calculated from the
effective plan date. As expected, most of the young plans have more workers
per beneficiary than older plans do. Less than 10 percent of the plans that
had been created in the previous five years reported fewer than five workers
per retired beneficiary. For plans operating twenty-five years or longer, nearly
49 percent had fewer than five active participants per beneficiary. The
changes in this relationship with increasing plan age are too consistent to be
coincidental. At the other end of the participant/beneficiary range, the
pattern is comparably consistent. More than 55 percent of plans less than five
years old had twenty or more active workers per beneficiary, while less than 11
percent of the oldest plans reporting had as many as twenty participants per
beneficiary.

Undoubtedly many of the older plans in Table 1 with high worker/beneficiary
ratios are in firms that are expanding. High worker/beneficiary ratios will
continue as some plan sponsors continue to expand in the future, but such
sponsors will still have increasing numbers of beneficiaries over the years.
This relationship of plan age and beneficiary rates becomes particularly
significant in comparison with defined-benefit plan creation data. 4/ Using
1977 as the reference year, because it corresponds with the ERISA data, the
universe of private defined-benefit programs grew by 218,487 plans in the

4/ These data are spelled out in detail in Sylvester J. Schieber, Social
Security: Perspectives on Preserving the System (Washington, D.C.: The
Employee Benefit Research Institute, 1982) p. 52.
previous twenty years; 32.0 percent of this growth occurred between 1973 and 1977 and 72.7 percent between 1968 and 1977. If all 28,169 tax qualified plans in existence at the end of 1955 were assumed to be defined-benefit plans, which is certainly not the case, 62.7 percent of all defined-benefit plans would have been less than ten years old at the end of 1977. The defined-benefit pension system in this country today is still quite young. As the system matures, the ratio of workers to beneficiaries will markedly decline, much as the ratio of workers to beneficiaries in the Social Security program declined during the 1950s and 1960s. The ratio will decline not because of fewer covered workers, but because of more beneficiaries. The relatively small number of beneficiaries today, however, results in significant overestimates of retirement program tax expenditures.

This bias in the tax expenditure estimates will decline, to some extent, as programs mature but can never be totally resolved because of the wage growth phenomenon cited earlier.

Unexplained Variations in the Estimates

One of the problems with the estimates of tax expenditures arising from the special tax provisions for retirement programs is precipitous changes in the estimates from year to year that are not explained. As an example of this inconsistency Table 2 shows the tax expenditure estimates due to the tax treatment of employer sponsored plans included in the last four Federal Budgets.

TABLE 2

FEDERAL REVENUE LOSS ESTIMATES FOR "TAX EXPENDITURES" DUE TO NET EXCLUSION OF PENSION CONTRIBUTIONS AND EARNINGS PRESENTED IN SELECTED FEDERAL BUDGETS

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>(dollar amounts in millions)</td>
<td>$12,925</td>
<td>$14,740</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1981 Budget</td>
<td>$19,785</td>
<td>$23,605</td>
<td>$27,905</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1982 Budget</td>
<td>$23,390</td>
<td>$25,765</td>
<td>$27,500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1983 Budget</td>
<td>45,280</td>
<td>49,700</td>
<td></td>
<td>$56,560</td>
<td></td>
</tr>
<tr>
<td>1984 Budget</td>
<td></td>
<td></td>
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<td></td>
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</table>

The 1981 Budget estimate of this particular tax expenditure for fiscal year 1981 was $14.7 billion. The 1982 Budget estimated the 1981 fiscal year tax expenditure for the identical category of plans at $23.6 billion -- a 60 percent increase. There was absolutely no explanation in the Budget documents explaining the changed estimate from one budget to the next. The only explanation that we have found for the 1980 and 1981 Budget differences is by Munnell who writes that the "Revised estimates employ higher, and therefore more realistic, marginal tax rate assumptions. These indicate a substantially larger tax expenditure for private plans." 5/ The explanation that higher marginal rates were used to generate the 1982 Budget estimates is plausible. What is interesting is that there is absolutely no published documentation on the actual rates used to generate either the 1981 or 1982 Budget estimates. Not only does Munnell ignore this completely throughout her book on private pensions but she also fails to explain her conclusion that the higher tax rate assumptions used in the 1982 Budget estimate are "therefore more realistic." There is certainly no a priori reason to believe that any set of assumptions is more realistic than another without an analytical basis on which to evaluate them. Such analysis was not available to compare the 1981 and 1982 Budgets. There is also a lack of analysis explaining even greater discrepancies between the 1983 and 1984 Budgets. The estimated fiscal 1982 tax expenditure due to net exclusion of employer pension contributions and trust fund earnings was 75.7 percent higher in the 1984 Budget than in the 1983 Budget. The projected growth in this category of tax expenditure during fiscal 1983 was 254.8 percent higher in the 1984 Budget than in the prior budget's estimate. Again, none of the Budget materials or other public documents explain the revised estimates.

Through an arduous process of telephone discussions with various staff at the Treasury Department a general explanation of the revised fiscal 1983 and 1984 estimates in the 1984 Budget has been pieced together. One reason for the difference in the two Budgets is that the analyst who did the 1983 Budget estimates retired and a new analyst prepared the 1984 Budget estimate. The new analyst has been able to partially clarify the discrepancy. The difference in the estimates for fiscal 1982 is $19.515 billion (i.e., $45.280 - $25.765). Of this $17.135 billion is attributable to higher estimated contributions and pension trust earnings. The remaining $2.380 billion in the higher tax expenditure estimate from the 1984 Budget is attributable to changes in the tax rate assumptions.

It appears the primary reason for the significantly (some would say astronomically) higher estimate of employer contributions and pension trust earnings is that federal civilian and state and local pension plans were included in the tax expenditure calculations for the first time. It is indicative of the relative generosity of public and private plans to consider that adding the tax expenditures attributable to public plans covering about 15 percent of the U.S. workforce can increase the tax expenditure estimate by more

than two thirds. This element of the revised tax expenditure estimate can be better understood by looking at recent annual contributions to pension trusts in the various sectors.

Table 3 includes recent annual contributions to privately sponsored retirement programs, state and local plans and the federal Civil Service Retirement System. While the latter does not include all federal civilian pension costs it does capture at least 90 percent of these costs and is sufficient for this comparative analysis. What is immediately apparent is that adding in the public employer plan contributions increases the previously considered employer contribution in 1981 by 63.5 percent (i.e., $38.26/$60.26). As stated above the 1983 Budget estimate of retirement plan related tax expenditures in 1982 was $25.8 billion. The 1984 Budget tax expenditure estimate was $17.1 billion higher (or 66.3 percent) because of added trust fund contributions and interest income considered. It appears that virtually all of this adjustment can be laid directly to the inclusion of the public plans for the first time.

### Table 3
EMPLOYER CONTRIBUTIONS TO RETIREMENT PROGRAMS FOR SELECTED PRIVATE AND PUBLIC EMPLOYER PLANS

<table>
<thead>
<tr>
<th>Year (billions)</th>
<th>Private Pension and Profit Sharing Contributions (Percent)</th>
<th>State and Local Contributions (Percent)</th>
<th>Federal Civil Service Retirement Contributions (Percent)</th>
<th>Aggregate Employer Contributions (billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970 $13.0</td>
<td>66.3%</td>
<td>4.6</td>
<td>23.5%</td>
<td>2.0</td>
</tr>
<tr>
<td>1971 15.0</td>
<td>65.5</td>
<td>5.2</td>
<td>22.7</td>
<td>2.7</td>
</tr>
<tr>
<td>1972 17.0</td>
<td>66.2</td>
<td>5.8</td>
<td>21.6</td>
<td>3.3</td>
</tr>
<tr>
<td>1973 20.7</td>
<td>66.3</td>
<td>6.6</td>
<td>21.2</td>
<td>3.9</td>
</tr>
<tr>
<td>1974 24.2</td>
<td>65.8</td>
<td>7.8</td>
<td>21.2</td>
<td>4.8</td>
</tr>
<tr>
<td>1975 27.6</td>
<td>63.6</td>
<td>9.1</td>
<td>21.0</td>
<td>6.7</td>
</tr>
<tr>
<td>1976 33.0</td>
<td>64.0</td>
<td>10.7</td>
<td>20.7</td>
<td>7.9</td>
</tr>
<tr>
<td>1977 34.4</td>
<td>63.9</td>
<td>12.4</td>
<td>20.6</td>
<td>9.3</td>
</tr>
<tr>
<td>1978 44.0</td>
<td>64.0</td>
<td>13.7</td>
<td>19.9</td>
<td>11.0</td>
</tr>
<tr>
<td>1979 48.9</td>
<td>63.5</td>
<td>15.3</td>
<td>19.9</td>
<td>12.8</td>
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<tr>
<td>1980 54.7</td>
<td>62.3</td>
<td>17.5</td>
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<td>15.6</td>
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<tr>
<td>1981 60.2</td>
<td>61.2</td>
<td>20.0</td>
<td>20.3</td>
<td>18.2</td>
</tr>
</tbody>
</table>

**SOURCES:**
The remaining $2.4 billion discrepancy in the 1983 and 1984 Budget estimates of retirement program tax expenditures for 1982 was attributed to changes in the tax rate assumptions. At first blush one might think that the effects of the Economic Recovery Tax Act of 1981 would be to reduce the tax rates considered for estimating these tax expenditures. Also the reductions in the contribution limits and other provisions in the Tax Equity and Fiscal Responsibility Act of 1982 should reduce the pension contributions and accruals for some individuals in the high marginal tax brackets.

Finally, the recommendation of the National Commission on Social Security Reform to tax Social Security benefits that was implemented in the Social Security legislation passed by Congress will raise marginal tax rates for many elderly pension recipients. Because the adjusted gross income thresholds at which Social Security benefits become taxable are not indexed the marginal tax rates of pension recipients should increase gradually in the future. Higher marginal tax rates among pension recipients should reduce future pension tax expenditure estimates under the current estimation methodology.

The assignment of pension contributions across individuals in the Treasury's Tax Model has not been publicly described making it difficult to understand the reasons for or mechanics of adjusting tax rates for purposes of these calculations, however. The analyst who generated the pension tax expenditure estimates for the 1984 Budget did not know how such contributions were assigned in the model when we called to ascertain such information. Nor was he able to provide such documentation in time for development of this discussion.

One possible reason for using higher tax rate assumptions in the 1984 Budget calculations than used a year earlier is the inclusion of public workers, especially those employed by the Federal government. "The mean annual earnings from the total civilian population employed full time in 1977 was approximately $13,849. The mean annual salary level of Federal employees covered by CSRS in April was $16,000." 6/ Inclusion of federal workers with their higher than average earnings may account for the revised tax rate assumptions used to calculate the pension tax expenditures in the 1984 Budget.

Inconsistencies in IRA and Pension Tax Expenditure Estimates

The Special Analysis G in the Federal Budget does not include separate estimates of the tax expenditures that are attributable to IRAs. The IRA related tax expenditures are embedded in a broader category of retirement "plans for self-employed and others." Table 4 shows the tax expenditure estimates for this broader category from the last four Federal Budgets. One might have expected significant increases in the tax expenditure estimates between the 1982 and 1983 Budgets, in particular, because of the passage of

TABLE 4
FEDERAL REVENUE LOSS ESTIMATES FOR "TAX EXPENDITURES" DUE TO NET EXCLUSION OF CONTRIBUTIONS TO RETIREMENT PLANS FOR THE SELF-EMPLOYED AND OTHERS PRESENTED IN SELECTED FEDERAL BUDGETS

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<tbody>
<tr>
<td>(dollar amounts in billions)</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1981 Budget</td>
<td>$2,125</td>
<td>$2,520</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1982 Budget</td>
<td>1,925</td>
<td>2,105</td>
<td>$2,305</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1983 Budget</td>
<td>2,170</td>
<td>2,560</td>
<td>$3,760</td>
<td></td>
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<tr>
<td>1984 Budget</td>
<td>2,835</td>
<td>3,755</td>
<td>$4,230</td>
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</table>


ERTA which roughly doubles IRA eligibility for 1982. Yet this 1982 tax expenditure estimate only increased by 11 percent between the two annual Budgets. In fact, the 1984 Budget estimate of the 1982 fiscal year tax expenditure was only 23 percent greater than the 1982 estimate in the 1982 Budget and 12.5 percent greater than the 1981 estimate in the 1981 Budget.

Even the 1983 Budget estimates might be understood since that Budget was prepared well before any substantive information on 1982 IRA utilization levels was available. But by the time the 1984 Budget was prepared there was evidence available suggesting that 1982 IRA utilization in response to ERTA jumped significantly over prior years. For example, EBRI released the data in Table 5 in a news release on November 19, 1982. This information was picked up quickly in both the trade press and the conventional media. This includes such newspapers as USA Today and The Washington Post. Table 5 shows that the IRA contributions during fiscal 1982 had to have been at least $21 billion.

In the preparation of the 1983 Budget, the 1981 expenditure for private plans was estimated at $23.4 billion (see Table 2) on contributions of $60.2 billion (see Table 3) and income on the trust funds. According to Munnell the average marginal tax rate of workers covered by a pension used to compute the pension tax expenditure was something in excess of 23 percent.7/ If the average marginal tax rate of 23 percent is applied to the minimum of $21 billion in IRA contributions then the foregone federal tax would be around $4.8 billion for

7/ Alicia H. Munnell, The Economics of Private Pensions (Washington, D.C.: The Brookings Institution, 1982) p. 44. Munnell explains that the 23 percent rate was used to prepare the estimate for the 1981 Budget but that higher marginal rates were used in preparing the estimate for subsequent budgets.
fiscal 1982. Given higher rates of IRA among upper income individuals this
assumed marginal tax rate is likely to be quite low, understating foregone tax
revenues in the current period. Few individuals are yet receiving significant
IRA based annuities so the tax collections on such annuities cannot explain the
discrepancy between the $4.8 billion estimated here and the $2.8 billion
estimated in the 1984 Budget. The discrepancy is even harder to reconcile when
the Budget's inclusion of Keogh plans is considered.

Other Foibles and Inconsistencies

The abstract concept of tax expenditures has been applied to private pensions
for some years now. The application of the concept has not recognized that the
implementation of ERISA's minimum funding standards has escalated private
employer's contribution rates in many instances. The more rapid funding of
pension obligations in compliance with federal law has contributed to the
growth in the tax expenditure estimates. By enhancing the "Retirement Income
Security," provided by pensions, the primary goal of ERISA - plan security is
now being jeopardized because the resulting increase in tax expenditures
heightens political pressure to reduce contribution levels. The tax
expenditure concept is now being applied to state and local and federal
civilian plans as well. Some might find it intriguing that the military
retirement program is still not included in the 1984 Budget estimates of tax
expenditures for employer sponsored retirement programs. The estimate does
include some amount attributed to military disability benefits -- but they make
up only about 9 percent of the military retirement program. The military
retirement program paid $13.7 billion in benefits during fiscal 1981 and thus
is the second largest pension plan in the United States, behind the Civil

### Table 5

**ASSETS IN INDIVIDUAL RETIREMENT ACCOUNTS, 1981-1982**

<table>
<thead>
<tr>
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<tr>
<td>(dollar amounts in billions)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial Banks 1/</td>
<td>$7.0</td>
<td>$13.0</td>
<td>$14.9</td>
<td>$16.2</td>
</tr>
<tr>
<td>Mutual Savings Banks 1/</td>
<td>3.4</td>
<td>4.5</td>
<td>5.8</td>
<td>5.9</td>
</tr>
<tr>
<td>Savings and Loans 1/</td>
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<td>16.3</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>Mutual Funds</td>
<td>2.6</td>
<td>4.0</td>
<td>4.3</td>
<td>5.0</td>
</tr>
<tr>
<td>Credit Unions</td>
<td>0.2</td>
<td>0.5</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>Life Insurance Co.</td>
<td>3.3</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td><strong>Total Assets</strong></td>
<td><strong>$25.7</strong></td>
<td><strong>$41.6 3/</strong></td>
<td><strong>$45.1 3/</strong></td>
<td><strong>$46.5 3/</strong></td>
</tr>
</tbody>
</table>

**SOURCES:** EBRI tabulations of data provided by Federal Reserve Board, National Association of Mutual
Savings Banks, National Credit Union Administration, Federal Home Loan Bank Board, U.S.League of
Savings Associations, Investment Company Institute and American Council of Life Insurance.

1/ IRA and Keogh deposits.
2/ Estimated.
3/ Baseline estimates using latest available date for each institutional category. The estimates
provide a minimum total asset amount, which may under report the actual amount of total assets
outstanding.
Service Retirement System. In many regards the military plan is the most generous large retirement program in this country today. In combination the federal civilian and military retirement programs cover about 5 percent of the total U.S. work force and paid retirement benefits in 1979 exceeding the benefits paid by all private pension programs. 8/

Why then, if including the federal civilian retirement program so significantly affects the tax expenditure estimates isn't the military retirement program included? One reason is that the military retirement program is totally unfunded with outstanding unfunded liabilities at the end of fiscal 1981 of $476.9 billion. Under the computation method used to estimate them no tax expenditure arises in this case. There is no contribution to or interest paid to a trust fund since none exists. The benefits paid are all taxable since the program is noncontributory.

Since the funding pattern of the plan doesn't fit the mold assumed by the computation method then the "tax expenditure" is ignored. In fact, the Civil Service plan is also largely financed on a pay-as-you-go basis. If these two retirement plans had met their normal cost contribution plus the 40 year annual amortization schedule stipulated in ERISA as the minimum funding requirement for private plans established before 1974, the total employer contribution to these two plans would have been $89.2 billion during fiscal 1981. 9/ This is 48.5 percent more than the total employer contribution going to all private plans in 1981 shown in Table 3 earlier. In other words, only one-fifth ($18.2 billion) of the federal contribution that would be required of private plans under ERISA is considered in the tax expenditure estimates when the Treasury Department estimates these for federal plans. If the estimates of tax expenditures are to be consistent, then the federal plans' tax expenditure estimates should be generated on a basis consistent with those used to estimate the private plan number. Because of the significant differences in plans across the various sectors and the role of government sponsorship or regulation, the tax expenditure estimates should be presented separately for federal, state and local, and private plans.

Relationship to Other Tax Expenditure Categories

Each of the tax expenditures is calculated on an item by item basis at the margin. That is, each is considered to be an "exception to the normal structure" of taxes, but is calculated as though all other exceptions are part of the normal structure for purposes of deriving the estimate. This ignores the extent to which one "exception" might be magnified because of the existence of others.

9/ This is based on actuarial reports on the Civil Service Retirement System and military retirement program filed with the United States Congress in compliance with Public Law 95-595 for fiscal year 1981.
For example, consider the case of a 66 year-old single man who received $8,400 in Social Security benefits during 1982 and an additional $8,400 in pension benefits. Assume there was no other income received and no special deductions considered for calculating tax liability. This person would have adjusted gross income of $8,400 under current law. He would be eligible for a double exemption since he was over age 65 and so his taxable income would be $6,400. Schedule X of 1982 Federal Income Tax Tables indicates a tax liability of $592.

Assume as an alternative, that this man had not enjoyed the double exemptions for being over age 65 or the nontaxability of Social Security benefits. These two provisions of the tax law are considered to be "exceptions to the normal structure" because tax expenditures are calculated for them as well. The Treasury analysts use the actual $592 in taxes paid on current benefits to estimate pension tax expenditures. However, if these other two "exceptions to the normal structure" of taxes did not exist then the man's 1982 tax liability would be $2,546.

It is clear that other "exceptions to the normal structure" give rise to large portions of tax expenditures attributed to pensions because they drastically lower marginal tax rates for the elderly. The utility of the pension tax expenditures estimate then, is extremely limited unless considered in the broader context of other tax provisions. Yet virtually no analysis of this kind is now available.

Conclusions

Many of the critics of pension programs point to the tax expenditure numbers as a basis for significant tax policy and pension reform. These critics have not applied their analytic capacities to any thorough discussion of the numbers that are published in the Budget each year. They have not considered the structure of other tax code provisions that affect the estimates. They have not considered the life cycle structure of earnings, benefit accruals and marginal tax rates that provide a radically different distribution of the tax expenditures than naive cross sectional analyses. They have totally ignored the inconsistencies in the actual calculation of these estimates, to say nothing of the significant methodological deficiencies in the calculation procedure.

Until the Treasury Department is willing to spell out in detail the derivation and numerical basis of these estimates they should be treated as nothing more than idle musings or random numbers. To seriously base any policy deliberation or decision on totally unsubstantiated, but clearly flawed numbers may result in the implementation of undesirable policies.
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